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AMENDMENTS IN THE CLAIMS:

1. (Canceled)

2. (Currently Amended) A reproduction apparatus ~~according to claim 1~~, comprising:

a signal input section for receiving an input signal;

an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,

wherein:

the input signal includes a variable-length frame including a header portion and a data portion; and

the input signal determination section determines whether or not a synchronization signal exists within the predetermined search area and, when a synchronization signal exists within the predetermined search area, calculates a position of a next synchronization signal based on the length of the frame so as to determine whether a next synchronization signal exists at the calculated position of the next synchronization signal.

3. (Original) A reproduction apparatus according to claim 2, wherein the length of the frame is calculated based on a bit rate of the header portion and a sampling frequency of the header portion.

4. (Original) A reproduction apparatus according to claim 2, wherein the input signal determination section modifies the predetermined search area if a next synchronization signal does not exist at the calculated position of the next

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synchronization signal so as to determine whether or not a synchronization signal exists within the modified predetermined search area.

5.   (Currently Amended)   A reproduction apparatus ~~according to claim 1~~, comprising:

a signal input section for receiving an input signal;

an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,

wherein:

the input signal includes a variable-length frame including a header portion and a data portion; and

the input signal determination section determines whether or not a bit rate of the header portion has a value which indicates that the bit rate is indefinite and, when the bit rate of the header portion has a value which indicates that the bit rate is indefinite, modifies the predetermined search area so as to determine whether a synchronization signal exists within the modified predetermined search area.

6.   (Currently Amended)   A reproduction apparatus ~~according to claim 1~~, comprising:

a signal input section for receiving an input signal;

an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,

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wherein:

the input signal includes a variable-length frame including a header
portion and a data portion; and

the input signal determination section modifies the predetermined search
area based on a value of a bit rate of the header section and at least one of data which
indicates a state of the frame of the header portion except for the value of the bit rate of
the header section so as to determine whether or not a synchronization signal exists
within the modified predetermined search area.

7.   (Currently Amended)   A reproduction apparatus according to
claim [1] 2, wherein the predetermined search area is 2 Kbyte.

8.   (Currently Amended)   A reproduction apparatus ~~according to claim 1~~
, comprising:

a signal input section for receiving an input signal;

an input signal determination section for determining a type of the input
signal based on whether or not a first synchronization signal among a series of
N synchronization signal exists within a predetermined search area of the input signal
(N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process
selected according to the type of the input signal on the input signal,

wherein, when the first synchronization signal among the series of
N synchronization signal exists within the predetermined search area, the input signal
determination section determines that the input signal is an encoded digital sound
signal.

9.   (Currently Amended)   A reproduction apparatus ~~according to claim 1~~
, comprising:

a signal input section for receiving an input signal;

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an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,

wherein, when the first synchronization signal among the series of N synchronization signal does not exist within the predetermined search area, the input signal determination section determines that the input signal is a pulse code modulation (PCM) digital sound signal.

10.   (Currently Amended)   A reproduction apparatus ~~according to claim 1~~, comprising:

a signal input section for receiving an input signal;

an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,

wherein the input signal determination section includes:

a data counter for counting a data amount of the input signal to output an address of the input signal;

a synchronization signal detection section for detecting a synchronization signal in the input signal to output a detection signal which indicates a result of the detection;

a synchronization signal counter storage section in which the detection signal is incremented based on the detection signal output from the synchronization signal detection section;

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a first synchronization signal address storage section for storing the address output from the data counter in response to a detection signal resulting from a first synchronization signal; and

a type determination section for determining the type of the input signal based on whether or not the address stored in the first synchronization signal address storage section exists within the predetermined search area and based on whether or not the value of the synchronization signal counter storage section is equal to or greater than N.

11.   (Original)   A reproduction apparatus according to claim 10, wherein:

the input signal includes a variable-length frame including a synchronization signal, a header portion, and a data portion; and

the input signal determination section further includes

a header information analyzing section for calculating a length of the variable-length frame including the detected synchronization signal in response to the detection signal so as to calculate an address interval between the detected synchronization signal and a next synchronization signal, and

a next synchronization signal address storage section which calculates an address of a next synchronization signal next to the first synchronization signal based on the address stored in the first synchronization signal address storage section and the calculated address interval and, when the calculated address of the next synchronization signal matches the address output from the data counter, stores the address output from the data counter.

12.   (Currently Amended)   A reproduction apparatus according to claim [1] 2, further comprising a host controller for changing an operating condition of the input signal determination section.

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13.   (Original)   A reproduction apparatus according to claim 12, wherein the operating condition of the input signal determination section includes at least one of a minimum unit of the input signal, the predetermined search area, and the value N.

14.   (Original)   A reproduction apparatus according to claim 13, wherein the minimum unit of the input signal is 1 bit.

15.   (Currently Amended)   A reproduction apparatus ~~according to claim 13~~, comprising:
        a signal input section for receiving an input signal;
        an input signal determination section for determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and
        a signal processing section for performing a signal processing process selected according to the type of the input signal on the input signal,
        further comprising a host controller for changing an operating condition of the input signal determination section
        wherein the operating condition of the input signal determination section includes at least one of a minimum unit of the input signal, the predetermined search area, and the value N, and
        wherein:
        the input signal includes a variable-length frame including a header portion and a data portion; and
        the predetermined search area is greater than the length of the frame.

16.   (Original)   A reproduction apparatus according to claim 4, further comprising a host controller for changing an operating condition of the input signal determination section,

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wherein the operating condition of the input signal determination section includes the modified predetermined search area.

17. (Original) A reproduction apparatus according to claim 16, wherein a leading address of the modified search area is at a position at least one bit greater than a last address of the first synchronization signal among the series of N synchronization signals.

18. (Original) A reproduction apparatus according to claim 6, further comprising a host controller for changing an operating condition of the input signal determination section,

wherein the operating condition of the input signal determination section is a value of at least one of data which indicates a state of the frame included in the header portion.

19. (Original) A reproduction apparatus according to claim 18, wherein the host controller prioritizes the value of the at least one of the data which indicates the state of the frame included in the header portion and changes the value of the at least one of the data which indicates the state of the frame included in the header portion based on the priority of the value.

20. (Currently Amended) A reproduction method, comprising steps of:
receiving an input signal;
determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and
performing a signal processing selected according to the type of the input signal on the input signal,

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wherein:

the input signal includes a variable-length frame including a header portion and a data portion; and

the determining step determines whether or not a synchronization signal exists within the predetermined search area and, when a synchronization signal exists within the predetermined search area, calculates a position of a next synchronization signal based on the length of the frame so as to determine whether a next synchronization signal exists at the calculated position of the next synchronization signal.

21.   (Currently Amended)   A program for directing a computer to perform a reproduction process, the reproduction process comprising steps of:

receiving an input signal;

determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

performing a signal processing selected according to the type of the input signal on the input signal,

wherein:

the input signal includes a variable-length frame including a header portion and a data portion; and

the determining step determines whether or not a synchronization signal exists within the predetermined search area and, when a synchronization signal exists within the predetermined search area, calculates a position of a next synchronization signal based on the length of the frame so as to determine whether a next synchronization signal exists at the calculated position of the next synchronization signal.

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22.   (Currently Amended)   A computer-readable recording medium containing a program for directing a computer to perform a reproduction process, the reproduction process comprising steps of:

receiving an input signal;

determining a type of the input signal based on whether or not a first synchronization signal among a series of N synchronization signal exists within a predetermined search area of the input signal (N is an integer equal to or greater than 2); and

performing a signal processing process selected according to the type of the input signal on the input signal.

wherein:

the input signal includes a variable-length frame including a header portion and a data portion; and

the determining step determines whether or not a synchronization signal exists within the predetermined search area and, when a synchronization signal exists within the predetermined search area, calculates a position of a next synchronization signal based on the length of the frame so as to determine whether a next synchronization signal exists at the calculated position of the next synchronization signal.